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Purpose: CERCLA Preliminary Assessment

DEC 31 1990

☐ Calendar

Site: Buckeye Properties
1296 Armstrong Avenue
San Francisco, CA 94124
San Francisco County

Site EPA ID Number: CAD982392243
TDD Number: F9-9008-020
Program Account Number: FCA1545PAA

FIT Investigators: Jennifer Eberle
Janet Kaps
Paul Brown

Date of Inspection: August 22, 1990 and
September 20, 1990

Report Prepared By: Jennifer Eberle

Through: Paul H. Brown *PJB*

Report Date: December 7, 1990

FIT Review/Concurrence:

James M. James 11/26/90

Submitted To: Paul La Courreye
EPA Region IX
Site Assessment Manager



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1. INTRODUCTION

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA) the U.S. Environmental Protection Agency (EPA) has tasked Ecology and Environment Inc.'s Field Investigation Team (FIT) to conduct a Preliminary Assessment of Buckeye Properties in San Francisco, CA. This report summarizes FIT's investigative efforts.

2. SITE DESCRIPTION

2.1 SITE LOCATION AND OWNER/OPERATOR HISTORY

The Buckeye Properties site is located in southeast San Francisco, San Francisco County, California. The Comprehensive Environmental Response Compensation and, Liability Information System (CERCLIS) file lists the site at 1296 Armstrong Avenue, San Francisco. This address is actually one of several which comprise the site, covering an approximate two block area bordered on the northeast by the South Basin Inlet (Township 2 South, Range 5 West, Mount Diablo Base Line and Meridian; Latitude: 37° 44' 06.0", Longitude: 122° 23' 18.0")(See Figure 1, Site Location Map)(1). The site covers roughly 7 acres in a primarily industrial area. Hunters Point Naval Shipyard lies approximately 800 feet east of the site. The site was a landfill created by filling the tidal flats of San Francisco Bay between approximately 1943 and 1955. When the landfill was closed in approximately 1955, the site was acquired by Ricci and Kruse Lumber Company. It is currently owned by Reginald Ricci, Anita Ricci, and Buckeye Properties, a partnership (2).

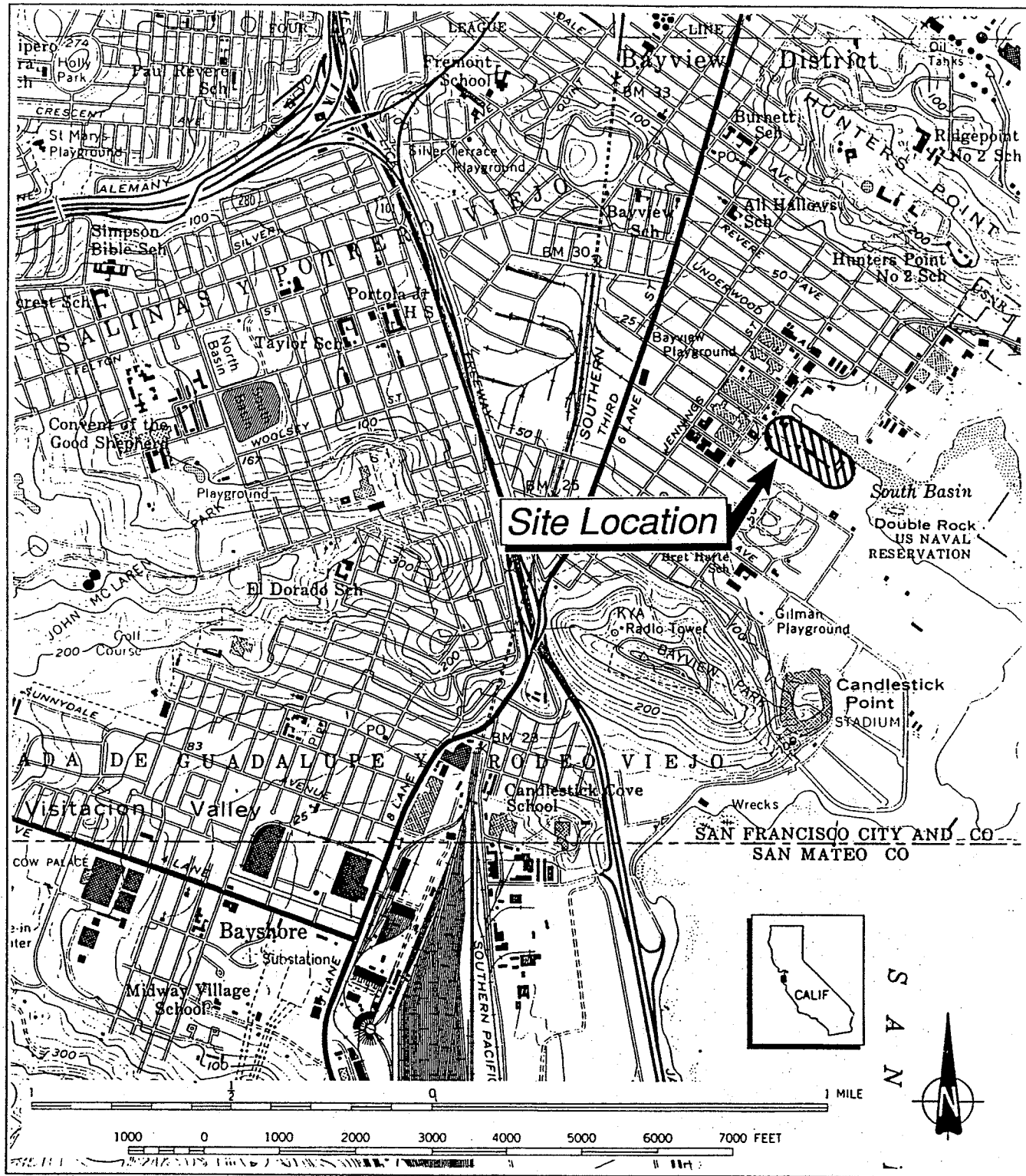
2.2 FACILITY PROCESSES/WASTE MANAGEMENT

2.2.1 HISTORICAL

The U.S. Navy built a railroad for access to Hunters Point Naval Shipyard in 1942. This rail spur runs along the northwest border of the site. It appears that the Navy thus restricted access southeast of the railroad in the 1940s and early 1950s (See Figure 2, Facility Map). The land immediately northwest of the Navy railroad was used as Navy housing during World War II. During the war and immediate post war period, much of the historic bay margin in South Basin was subjected to considerable fill and dumping operations, either by the U.S. Government, its contractors, or private individuals following cessation of the war emergency. The filling of the bay margin in the South Basin appears to have been indiscriminate, both within and outside the boundaries of the Naval Reserve at Hunters Point. Portions of the Hunters Point Naval Shipyard were built on landfill reclaimed from the bay at the same time as the Buckeye Properties site (2).

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Source: U.S.G.S. 7.5' San Francisco South Quad.



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Figure 1

SITE LOCATION MAP
 Buckeye Properties
 1296 Armstrong Avenue
 San Francisco, California

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Disposal at the Buckeye Properties site included construction debris, waste oil, and uncontained or drummed liquid chemical wastes. Excavation in the 1980s revealed the following: significant amounts of ship rigging and cables, large quantities of stainless steel, canteens, hospital waste including bedpans, IV bottles, and empty pharmaceutical bottles, jeep tires, metal shop waste, railroad carts, metal drums and containers occasionally containing a waste oil-like liquid, and large quantities of hot water heaters. A considerable amount of this material was apparently derived from World War II.

Photographs of the sidewalls of excavations indicate that voids within the fill were occasionally filled with a waste oil-like substance. Aerial photos from 1951 and 1953 indicate the location of a liquid waste pit (see Figure 2, Facility Map). Unfortunately, many of the particulars on fill constituents are unknown. This landfill was completed in approximately 1955 (2).

2.2.2 CURRENT

The site is currently occupied by buildings and vacant lots. Approximately 25 percent of the site is paved. There are several businesses which lease sections of the site from the Buckeye Properties partnership. These lessees include Ranger Pipeline, City Debris, L & K Wood Recycling, Bay Door, Armstrong Roofing, a glass company, another roofing company, and a partnership of several independent truckers. Telephone interviews and contacts made with people during a drive-by of the site revealed no evidence of ongoing hazardous waste disposal on site (3).

3. APPARENT PROBLEM

During the installation of a sewer line under Armstrong Avenue by the City of San Francisco's Department of Public Works (DPW) in 1986, contamination was found to exist in the groundwater and soils beneath a portion of the site. A consulting firm contracted by the City/County of San Francisco DPW installed monitoring wells and collected soil borings in conjunction with the sewer line construction (see Figure 2-Facility Map). Several CERCLA hazardous substances, including polychlorinated biphenyls (PCB's) and cadmium, were found to exist in groundwater and soil. Laboratory analyses revealed 3.7 mg/kg PCBs as Aroclor 1260 in monitor well MW-1 (4); 800 parts per billion (ppb) benzene and 1,200 ppb xylene in groundwater sample 7A; and 680 ppm total petroleum hydrocarbons, 12 ppm cadmium and 230 ppm lead in soil boring 7A (2). The contamination problem was reported in September 1989 to the Enforcement Section of the EPA by an attorney for Buckeye Properties (2).

4. REGULATORY INVOLVEMENT

San Francisco's Department of Public Works' (DPW) Clean Water Program is involved with the site in light of the sewer construction project, known as the Yosemite-Fitch Outfall Consolidation (YFOC) project. No other agencies are involved with the site (5).

The site is not listed in the Resource Conservation and Recovery Act (RCRA) database as of December 1, 1988. It is also not included on the January 1990 update of the California Expenditure Plan for the Hazardous Substances Cleanup Bond Act of 1984.

5. HRS FACTORS

The Hazard Ranking System (HRS) is a scoring system used to assess the relative threat associated with actual or potential releases of hazardous substances from sites. It is the principal mechanism EPA uses to place sites on the National Priorities List (NPL). EPA has proposed revisions to the HRS, pursuant to the Superfund Amendments and Reauthorization Act of 1986 (SARA). FIT has evaluated the following proposed revised HRS factors relative to this site.

5.1 WASTE TYPE AND QUANTITY

The landfill appears to be a source of potentially uncontained hazardous substances. The site does not appear to be equipped with an engineered cover, run-on control system and runoff management system, or leachate collection and removal system. Based on aerial photos and the site's current elevation, the landfill's dimensions are approximately 1,000 feet by 300 feet by 9 feet (length x width x depth), yielding a volume of 100,000 cubic yards, and a surface area of 300,000 square feet, or approximately 7 acres. Hazardous substances associated with the landfill include toluene, benzene, xylene, cadmium, lead, chromium, copper, nickel, 1,2-dichloroethylene, anthracene, benzo(a)pyrene, chrysene, naphthalene, pyrene, and PCBs (2). Several of these contaminants are highly toxic and persistent in the environment (14).

5.2 GROUNDWATER

Groundwater does not appear to be a pathway of concern because groundwater is not used as a drinking water source in San Francisco and there are no drinking water wells located within 4 miles of the site (6, 7).

5.3 SURFACE WATER

The likelihood of release to surface water appears to be high due to the potential to release by overland flow, by flood, and by leaching of contaminated groundwater into San Francisco Bay. There is a lack of adequate containment due to a lack of evidence to suggest that the site is equipped with a maintained engineered cover, run-on control system and

runoff management system, or functioning leachate collection and removal system. Surface water may easily run off the site into the San Francisco Bay due to several factors. The site is partially paved with buildings, partially unpaved, and partially vegetated (3). The site's two-year, 24-hour rainfall is 2.5 inches (8). The soils underlying the site were estimated to have a moderate infiltration rate because the artificial fill was reported as consisting of a heterogeneous mixture of gravel and silty to clayey sand with small amounts of clay (2). The site lies adjacent to the South Basin Inlet which empties into the San Francisco Bay (3).

Additionally, there is a likelihood that contaminated groundwater within the fill area could migrate through tidal influence into the San Francisco Bay. Table 1 lists contaminants which were detected in groundwater at the site.

Table 1
Highest Levels of Contaminants Detected in Groundwater
at the Buckeye Properties Site

<u>Contaminant</u>	<u>Concentration (ug/L)</u>	<u>Maximum Contaminant Level (MCL)(ug/L)</u>
benzene	800	1*
toluene	140	100**
ethylbenzene	1000	680*
xylene	1200	1750*
1,1-dichloroethylene	<0.5 - 200	6*
Polychlorinated biphenyls (PCBs)	3700	0.5***

*MCLs taken from California Code of Regulations Title 22 (April 1989)

**State Action Level recommended by the California Department of Health Services (April 1989)

***MCL taken from U.S. Environmental Protection Agency (June 1989)

Most of San Francisco Bay and approximately 5 miles of the Pacific Ocean west of the Golden Gate Bridge are included within 15 miles of the site. There are several fisheries in this area. These fisheries produce 19 million pounds per year of herring, 1,115 pounds per year of chinook salmon, 179,000 pounds per year of California halibut, and 10,000 pounds per year of little-neck clams (10,11,15). There are also several sensitive environments in this area (See Table 2)(12). San Francisco Bay is not used for drinking water.

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Table 2
Sensitive Environments
within 15 miles of the Buckeye Properties Site

<u>Sensitive Environment</u>	<u>Distance from site (miles)</u>
Golden Gate National Recreation Area	8
San Francisco Bay National Wildlife Refuge	14
Angel Island State Park	2.5
California clapper rail (<u>Rallus Longirostris obsoletus</u>)	2
California least tern (<u>Sterna antillarum</u>)	2
California brown pelican (<u>Pelecanus occidentalis</u>)	4
Saltmarsh Harvest Mouse (<u>Reithrodontomys raviventris</u>)	2.25

The Buckeye site appears to pose a significant potential for human food chain contamination due to the high potential for a release to surface water and the existence of several nearby commercial fisheries.

5.4 AIR

The air pathway does not appear to be a primary pathway of concern because there are no apparent inadequately contained hazardous substances available to the air. The site is partly covered with asphalt and buildings. The remainder is unpaved and generally vegetated with some exposed soils. It is likely that hazardous substances disposed of in the landfill between 1943 and 1955 have been covered by at least 6 inches of clean fill (3).

5.5 ON-SITE

There appears to be a potential for on-site exposure at the site due to the likely absence of more than 2 feet of clean fill above the landfill. The surface area of the landfill is approximately 300,000 square feet or 7 acres. The site is accessible at various locations; it is partially fenced. The site is an industrial area and workers are present for part of the day. One person lives in a trailer residence on site. There are also nearby residences; 20,392 people live within a 1-mile radius (13).

6. SUMMARY OF FIT INVESTIGATIVE ACTIVITIES

The California Department of Fish and Game was contacted for information regarding fisheries in the San Francisco Bay. The U.S. Army Corps of Engineers was contacted for floodplain information. The City/County of San Francisco Department of Public Works was contacted to determine the

nature of its involvement with the site. A file search at the following agencies revealed no agency involvement with the site: City/County of San Francisco Department of Environmental Health, California Regional Water Quality Control Board, and California Department of Health Services.

FIT conducted a site drive-by and noted that approximately 25 percent of the site is paved with asphalt and/or buildings. The remainder of the site is exposed soil with or without vegetation. An on-site trailer residence was found. Along the water's edge are rusted drums, scrap metal, construction debris, wood, and poured concrete and/or asphalt. The area southeast of Griffith St. is vacant and overgrown with vegetation. Numerous aquatic and terrestrial bird species inhabit this portion of the site. Business tenants contacted indicated that no hazardous materials are associated with their enterprises (3).

7. EMERGENCY RESPONSE CONSIDERATIONS

Due to the 40- to 50-year period that wastes have been contained in the landfill, it is unlikely that rapid emergency response could effectively prevent substantial contaminant migration. In addition, the site does not threaten the drinking water supply and it is likely that there is no exposed surface contamination. No regulatory attention appears to be focused on the site at this time (2,6,7).

8. SUMMARY OF HRS CONSIDERATIONS

The Buckeye Properties site comprises approximately two city blocks in southeast San Francisco near Hunters Point Naval Shipyard. The site is a landfill which was reclaimed from San Francisco Bay in the 1940s and early 1950s, and is currently used for industrial purposes. Portions of the Hunters Point Naval Shipyard were also built on landfill reclaimed from the bay at the same time as the Buckeye Properties site. The U.S. Navy built a railroad in 1942 to Hunters Point which apparently limited access to the site to the Navy and its contractors in the 1940s and early 1950s. The land immediately northwest of the Navy railroad was used as Navy housing during World War II.

In 1986, sampling performed by consultants in conjunction with the construction of a sewer project at the site revealed contamination in groundwater and soil. Laboratory analysis revealed the presence of polycyclic aromatic hydrocarbons, halogenated hydrocarbons, aromatic hydrocarbons, heavy metals, and polychlorinated biphenyls.

There is no state involvement with the site by either the Department of Health Services or the Regional Water Quality Control Board.

The following are significant Hazard Ranking System Factors associated with Buckeye Properties:

- o There is observed soil and groundwater contamination on site,
- o Cadmium has a high toxicity and high persistence in the environment,
- o There is a large commercial fishery located in San Francisco Bay,
- o There are several sensitive environments, including federally protected species, located in San Francisco Bay, and
- o There is an on-site trailer residence, as well as a large residential population within 1 mile of the site.

9. EPA RECOMMENDATION

	<u>Initial</u>	<u>Date</u>
No Further Remedial Action Planned under CERCLA	_____	_____
Higher-Priority SSI under CERCLA	<u>RL</u>	<u>12/21/90</u>
Lower-Priority SSI under CERCLA	_____	_____
Defer to Other Authority (e.g. RCRA, TSCA, NRC)	_____	_____

Notes:

10. REFERENCES

1. U.S. Geological Survey (USGS), map of San Francisco South, 7.5-minute quadrangle, 1956 (photorevised 1980).
2. French, Christopher M., Environmental Investigation, Remediation and Risk Assessment, "Phase I Report for property Located in San Francisco," Berkeley, CA, November, 1989.
3. Eberle, Jennifer, Janet Kaps, and Paul Brown, Ecology and Environment, Inc.'s Field Investigation Team (E & E FIT), Site Drive-By and Observations Report, 8/22/90 and 9/20/90.
4. Precision Analytical Laboratory, Inc., lab results: PCBs as Aroclor 1260, Monitor Well MW-1, San Francisco, CA, June 7, 1989.
5. Coffee, Harold, City of San Francisco Department of Public Works (DPW), and Jennifer Eberle, E & E FIT, telephone conversation, August 29, 1990.
6. Hamlin, Scott, and Gus Yates, USGS, and Jennifer Eberle, E & E FIT, telephone conversation, October 2, 1990.
7. O'Connor, Lois, City of Brisbane, and Jennifer Eberle, E & E FIT, telephone conversation, October 2, 1990.
8. U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, NOAA Atlas II, Precipitation-Frequency Atlas of the Western United States, Volume XI-California, p. 37, Silver Spring, MD, 1973.
9. Hernandez, Carlos, U.S. Army Corps of Engineers, and Jennifer Eberle, E & E FIT, telephone conversation, August 27, 1990.
10. Riley, Paul, and Alan Grover, California Department of Fish and Game, and Jennifer Eberle, E & E FIT, telephone conversation, August 27, 1990.
11. Castle, Ken, "Halibut Hits the Skids as Nets Return," San Francisco Chronicle, August 27, 1990.
12. U.S. Fish and Wildlife Service, map of Pacific Coast Ecological Inventory for San Francisco, California, 1:250,000-scale, 1981.
13. U.S. EPA, Office of Toxic Substances, Graphic Exposure Modeling System, March 1989.
14. Versar, Inc., Prescore Target Compound List, "Reference Tables for Toxicity and Other Substance-Specific Values," prepared for EPA Hazardous Site Evaluation Division, August 10, 1990.
15. Department of Fish and Game, Marine Resources Division, "Catch Block Data for 1987," derived from Annual IAA Report, August 31, 1988.

APPENDICES

SITE DRIVE-BY AND OBSERVATIONS REPORT

Ecology and Environment, Inc.	
Field Investigation Team (FIT)	
160 Spear Street, Suite 1400	
San Francisco, California 94105	
(415) 777-2811	
E & E PERSON(S) CONDUCTING DRIVE-BY AND MAKING OBSERVATIONS:	
Jennifer Eberle & Janet Kaps (8/22); Jennifer Eberle & Paul Brown (9/20)	
SITE NAME: Buckeye Properties	DATE: 8/22/90, 9/20/90
CITY/STATE: San Francisco, California	EPA ID#: CAD982392243

The following information was obtained during the drive-by:

A worker at one of the trucking companies (corner Hawes St. and Yosemite Ave.) told us they do demolition and hauling work, and that all their waste oil is hauled off-site. He said their operation had been at this location for approximately one year. He declined to identify himself.

A secretary at Ranger Pipelines told us that they install underground pipelines. They produce no hazardous wastes, and their operation has been at this location for approximately 1 1/2 years. She also pointed out a trailer across Armstrong Ave. with a 14 foot fence around it in which somebody lives.

The following observations were made during the drive-by:

A site plan showing approximate locations of lessees was drawn up (see Fig. 1-2). An on-site trailer residence was noted southwest of Armstrong Ave. The area southeast of "Griffith St." is vacant, overgrown with vegetation and teeming with birdlife. This area is raised up approximately 8 feet higher than the Buckeye Properties site. Along the water's edge off Yosemite Ave. extension are rusted drums, scrap metal, construction debris, wood and poured concrete and/or asphalt. Various trucks and buses were also found on Yosemite Ave. extension, as well as in the area of the trailer residence. Approximately 25% of the entire site is paved with asphalt and/or buildings. The remainder is exposed soil with or without vegetation. There is no apparent contamination at the ground surface.

CONTACT LOG

Facility Name: Buckeye Properties
Facility ID: CAD982392243

Name	Affiliation	Phone #	Date	Information
Thomas Amen	Law firm	415-433-1790	8/9/90	See Contact Report.
Chuck Flippo	EPA	415-744-1996	8/21/90 9/14/90	See Contact Report.
Paul Riley Alan Grover	CA Fish & Game	415-688-6362	8/27/90	See Contact Report.
Carlos Hernandez	US Army Corps of Engineers	415-744-3359	8/27/90	Site is in 500-year floodplain.
Harold Coffee	SF DPW	415-550-2750	8/29/90 9/6/90	See Contact Report.
Bea Atkins	SF Envi. Health Dept.-HazMat	415-554-2775	9/6/90	No agency involvement with Buckeye Properties.
Tom Gandesbery	RWQCB	415-464-1255	9/10/90	No agency involvement with Buckeye Properties.
Doris Cruz	DHS	415-540-3800	9/11/90	No agency involvement with Buckeye Properties.
Paul La Courreye	EPA	415-744-1914	9/13/90	See Contact Report.
Dien Nguyen	City Debris	415-822-3334	9/21/90	See Contact Report.
Scott Hamlin Gus Yates	USGS	916-978-4648	10/2/90	See Contact Report.
Lois O'Connor	City of Brisbane	415-467-1515	10/2/90	See Contact Report.

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CONTACT REPORT

AGENCY/AFFILIATION: Amen, Keith & Berg, P.C.		
DEPARTMENT: Law Offices		
ADDRESS/CITY: 847 Sansome Street/SF		
COUNTY/STATE/ZIP: San Francisco/California/94111		
CONTACT(S)	TITLE	PHONE
1. Thomas Amen	Attorney	415-433-1790
2.		
E & E PERSON MAKING CONTACT: Jennifer Eberle		DATE: 8/9/90
SUBJECT: Background contacts		
SITE NAME: Buckeye Properties		EPA ID#: CAD982392243

Christopher French did an extensive report on the site characterization.

City dug monitor well regarding Yosemite outfall (Clean Water Dept.)

Amen does not want to send me a copy of his files and would rather I come into his office to see what I would like copied.

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je/bp/clcr

CONTACT REPORT

AGENCY/AFFILIATION: EPA		
DEPARTMENT: Superfund		
ADDRESS/CITY: 1235 Mission Street/SF		
COUNTY/STATE/ZIP: San Francisco/California		
CONTACT(S)	TITLE	PHONE
1. Chuck Flippo	Remedial Project Manager	415-865-7630 h
2.		744-1996 w
E & E PERSON MAKING CONTACT: Jennifer Eberle		DATE: 8/21,9/14
SUBJECT: Hunter's Point relation to the site		
SITE NAME: Buckeye Properties		EPA ID#: CAD982392243

8/21/90

Hunters Point is on NPL. There are lessees of Navy property. Buckeye Properties at 1296 Armstrong Avenue is not included in this site.

9/14/90

He studied French's report and was especially interested in the aerial photos, which reveal reclamation of the bay both at the site and at Hunter's Point during the same time.

The navy is afraid that contamination from surrounding businesses are coming into their property. Go ahead and write PA, with references to navy.

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je/bp/clcr